AMENDMENTS TO THE CLAIMS WITH MARKINGS TO SHOW CHANGES MADE, AND LISTING OF ALL CLAIMS WITH PROPER IDENTIFIERS

1.-19. (Canceled)

20. (New) A device for stimulating a muscle contraction of a muscular-driven heart assist system which operates in parallel or in series with a diseased heart, comprising:

a pulse generator unit for generating and supplying electric stimulation pulses;

a control unit for controlling the pulse generator unit for setting an amplitude and a frequency of the stimulation pulses and for causing the stimulation pulses to be applied to a muscle to be stimulated;

a detection unit for detecting an instantaneous, spontaneous or stimulated heart rhythm of a wearer of the device;

a housing receiving the pulse generator unit, the control unit and the detection unit;

a memory module for storing the temporal course of the number of supplied stimulation pulses within a defined time interval;

a counting unit and a memory unit for counting and storing a number of stimulation pulses supplied during the defined time interval, wherein the stimulation pulses are grouped into variable stimulation bursts;

a determination unit for determining an arithmetically averaged (mean) stimulation frequency within the defined time interval, with the mean stimulation frequency being computed as the quotient of the number of stimulation pulses of the variable stimulation bursts supplied during the defined time interval and stored in the memory unit and the defined time interval in which the stimulation pulses are counted and stored;

a continuously operating evaluation unit for ascertaining that the mean stimulation frequency stays within preset limit values, wherein the limit values

of the mean stimulation frequency can be individually preset in a range between 0.2 stimulation pulses per second and a maximum of 2 stimulation pulses per second;

pulse conservation means for reducing the mean stimulation frequency depending on the maximum mean stimulation frequency preset in the evaluation unit, wherein the pulse conservation means comprise a computing unit for computing a stimulation pattern according to an equation which determines the stimulation pattern as a function of the mean stimulation frequency and wherein the number of stimulation pulses during a stimulation burst can be varied to reduce the mean stimulation frequency; and

a monitoring unit worn by the wearer of the device external to the body for displaying the mean stimulation frequency and for self-control of the patient.

21. (New) The device of claim 20, further comprising means for program-controlled transmission of the mean stimulation frequency from the determination unit to the evaluation unit.

22. (New) The device of claim 20, further comprising an analysis unit for determining how often and when certain limit values of the heart rate and/or of the mean stimulation frequency are exceeded or underrun.

23. (New) The device of claim 20, wherein the counting unit and the memory unit are received in the housing.

24. (New) The device of claim 20, wherein the determination unit and/or the pulse conservation means are integrated in the housing which receives the control unit.

25. (New) The device of to claim 22, wherein the memory module and/or the analysis unit are integrated in the housing which receives the control unit.

26. (New) The device of claim 20, wherein the monitoring unit comprises a programming unit for generating a programming signal, and a transmission unit for transmitting the programming signal to a send and receive unit located in the housing which receives the control unit.

27. (New) The device of claim 20, wherein at least one of the counting unit, the memory unit, the determination unit, the pulse conservation means, the memory module and the analysis unit are a part of a stationary monitoring unit or of the monitoring unit worn by the wearer of the device external to the body.

28. (New) The device of claim 20, wherein the mean stimulation frequency, or an order of magnitude of the mean stimulation frequency, is displayed on the monitoring unit by optical, acoustic or haptic means, or a combination thereof.

29. (New) The device of claim 20, wherein the monitoring unit includes means for sending and receiving position data.

30. (New) The device of claim 29, wherein the monitoring unit includes means for sending and receiving wireless signals for transmitting patient-physiological data to a display and evaluation unit of a remote receiver.

31. (New) The device of claim 20, wherein the pulse generator unit transmits biphasic stimulation pulses.

32. (New) The device of claim 20, further comprising a transcutaneously chargeable energy storage device received in the housing.

33. (New) The device of claim 20, wherein the defined time interval is at least 30 minutes.

34. (New) The device of claim 20, wherein the defined time interval is at least 12 hours.

35. (New) The device of claim 20, wherein the defined time interval is at least 24 hours.

36. (New) The device of claim 20, wherein the amplitude of the stimulation pulses within a stimulation burst is variable.

37. (New) The device of claim 20, wherein a pulse width of the stimulation pulses within a stimulation burst is variable.

38. (New) The device of claim 20, wherein a temporal spacing between two stimulation pulses within a stimulation burst is variable.

39. (New) A method for generating and supplying electric stimulation pulses to stimulate a muscle contraction of a muscular-driven heart assist system which operates in parallel or in series with a diseased heart, comprising the steps of:

setting a pattern for the stimulation pulses and causing the stimulation pulses to be applied to a muscle to be stimulated;

setting limit values for an arithmetically averaged (mean) stimulation frequency;

detecting an instantaneous, spontaneous or stimulated heart rhythm;

determining the mean stimulation frequency of the applied stimulation pulses within the defined time interval; and

if the heart rhythm shows a low activity and the mean stimulation

frequency of the applied stimulation pulses exceeds an upper limit value, changing the pattern for the stimulation pulses so as to reduce the frequency of the applied stimulation pulses within the defined time interval.